

# **GRAIN TRANSPORTATION REPORT**

Transportation & Marketing, Agricultural Marketing Service United States Department of Agriculture

**NOVEMBER 12, 2002** 

TM GRAIN TRANSPORT	Truck	Rail	Barge	Ocean	
COST INDICATORS				Gulf	PNW
Indicator Value * for 11/12	96		124	111	105
Compared to Last Week	down		up	down	up

\*Indicator: Base Year 2000=100; Cost Data, Weekly Updates include Truck=Diesel, Rail=Nearby Secondary Rail Market;
Barge=Spot Illinois River Basis; Quarterly Updates for Ocean Vessel based on Routes to Japan

Temporary Shortage of Grain Storage in Iowa. Due to Iowa's bumper crop of corn (the best since 1994), there will be grain on the ground—potentially up to 119.7 million bushels using USDA crop estimates and up to 187.4 million bushels using Sparks' latest crop estimates. This estimate of the potential amount of grain on the ground does not take into account the moderating effects of September and October disappearance of Iowa-grown grain or the movements of this grain to out-of-State storage facilities. Even considering these moderating factors, however, a sizeable amount of Iowa-grown grain will need to be relocated; a situation that was not unexpected. Minnesota also has had a bumper crop and will probably have a large amount of grain on the ground. Although the supply of transportation is limited, no major transportation problems are expected to develop. Marvin.Prater@usda.gov.

Ocean Grain Shipments Up from Last Quarter but Below Last Year. The Federal Grain Inspection Service (FGIS) inspected 20.7 million metric tons of grain for export from all U.S. ocean ports during the third quarter of 2002. While this is up 3.3 percent from the second quarter of 2002, it is 10.1 percent below the third quarter of 2001 and 10.1 percent below the 5-year third-quarter average. FGIS inspected 16.2 million metric tons of grain for export from the U.S. Gulf during the third quarter of 2002, which was 5.5 percent below both the third quarter of 2001 and its 5-year average. FGIS inspected 3.6 million metric tons of grain for export from the Pacific Northwest during the third quarter of 2002, down 7.9 percent from the third quarter of 2001 and 18.7 percent below its 5-year average. Only 0.79 million metric tons of grain were inspected for export from the East Coast and the Great Lakes regions, down 34.5 percent from both the third quarter of 2001 and the 5-year average for these regions. *Grain Transportation Prospects*, October 2002, www.ams.usda.gov/tmd/mta/mta special reports.htm

**Barge Freight Rates Below Average**. For the third quarter of 2002, Minneapolis-St. Paul, MN, to New Orleans, LA, barge freight rates were reported at 172 percent of tariff, 23 percent below the 5-year average of 222 percent of tariff. Barge rates are quoted in terms of differentials from barge tariff benchmarks. The tariff rate from Minneapolis-St. Paul is \$6.19 per ton; therefore, the spot market rate quoted is 1.72 times \$6.19 or \$10.65 per ton. Average third quarter rates for St. Louis, MO, to New Orleans were 113 percent of tariff (\$4.51 per ton based upon a \$3.99 tariff), 32 percent lower than the 5-year average of 165 percent of tariff. Barge futures for November shipments were quoted at 200 percent for Minneapolis-St. Paul and 138 percent for St. Louis. This suggests that for the rest of the year, barge shipment rates will be below average. *Grain Transportation Prospects*, October 2002, www.ams.usda.gov/tmd/mta/mta\_special\_reports.htm

**Railroads Planning for Fall Grain Traffic.** Major railroads are currently working to allocate their equipment and crews to reflect expected changes in traditional market patterns. This year's drought will force buyers to obtain grain and oilseeds from markets they normally do not access. Cycle times on the railroads may be a little slower this fall due to the challenges associated with crew availability, abnormal market patterns, and increased volume from nonagricultural traffic. *Grain Transportation Prospects*, October 2002, www.ams.usda.gov/tmd/mta/mta\_special\_reports.htm

Report is prepared by Deen Olowolayemo, Johnny Hill and Hooshang Fazel, Agricultural Economists, Transportation & Marketing, Agricultural Marketing Service, USDA (202) 690-1304. Support provided by Upper Great Plains Transportation Institute, North Dakota State University. This report can be found on the Internet at www.ams.usda.gov/tmd/grain.htm ..or contact Surajudeen.Olowolayemo@usda.gov

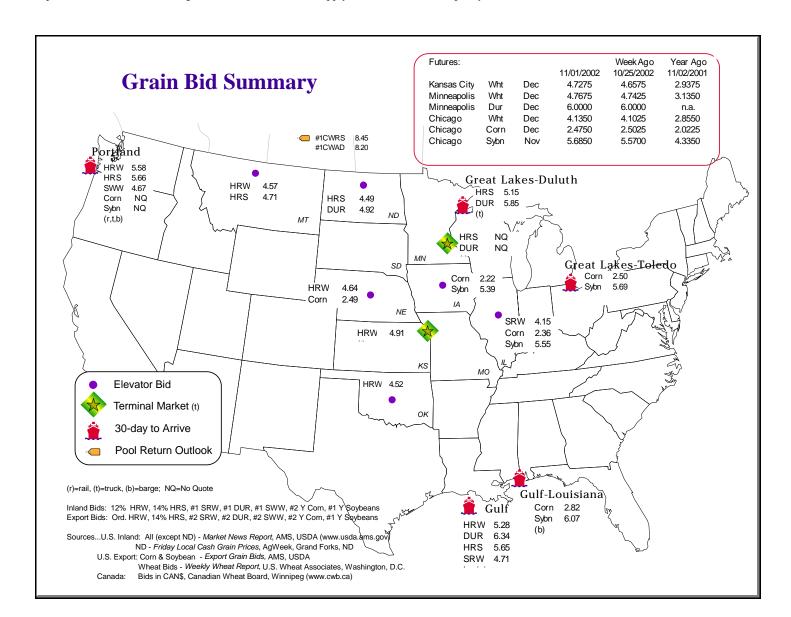
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The Grain Transportation Report is a weekly news source for grain logistics. Detailed data and trend information on five major modes: barge, truck, rail, container, and vessel, provide timely insight into grain transport. The report is offered to policymakers and industry as a tool in day-to-day decision making and longer-term strategic planning for an effective and efficient U.S. grain logistics system.

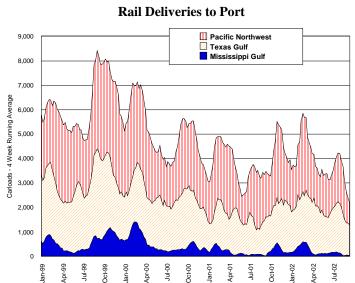
Market Update: U.S. Origins to Export Position Price Spreads Per Bushel						
Commodity	OriginDestination	This week	Last week			
Corn	IL Gulf	-0.46	-0.42			
Corn	NE Gulf	-0.33	-0.30			
Soybean	IA Gulf	-0.68	-0.62			
HRW	KS Gulf	-0.37	-0.38			
HRS	ND Portland	-1.17	-1.21			

The **Grain Bid Summary** illustrates the market relationships for corn, soybeans, and five varieties of wheat among selected origins and destinations. Positive and negative adjustments in the differential between terminal and futures markets, and the relationship to inland market points, are indicators of changes in fundamental market supply and demand. The map may be used to monitor market and time differentials.

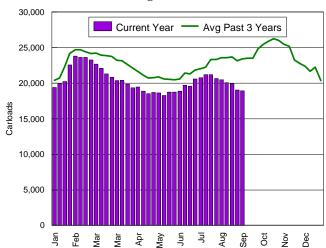


## **RAIL TRANSPORTATION**

Rail Deliverie	es to Port				
	Mississippi Gulf*	Texas Gulf	Pacific Northwest	Atlantic & East Gulf	Total
Week Ending:					
10/23/02	189	1,322	3,553	739	928
10/30/02	45	988	3,749	557	602
YTD 2002	9,668	73,723	88,050	17,837	27,505
YTD 2001	8,860	66,254	94,569	21,933	30,793
% of Last Year	109%	111%	93%	81%	89%
Total 2001	10,022	81,804	111,376	26,604	229,806
Total 2000	25,767	104,473	128,414	14,816	273,470
Source: Transportat	ion & Marketing	g/AMS/USI	DA; (*) Incom	plete Data	



## **Grain Car Loadings for Class I Railroads**



Railroads originate approximately 40% of U.S. grain shipments. Trends in these loadings are indicative of market conditions and expectations.

Class I Rail Carrier Grain Car Bulletin

Grain Carloads Originated and Grain Service Index

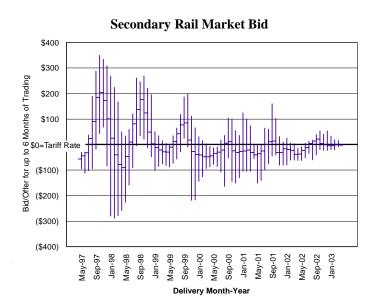
	E	ast	West			Canada		
	CSXT	NS	BNSF	KCS	UP	U.S. Total	CN	CP
11/02/02	3,500	3,349	8,629	178	6,772	22,428	3,053	5,022
This Week Last Year	3,432	4,297	11,006	664	7,518	26,917	5,055	5,486
2002 YTD	120,016	138,171	333,301	22,834	290,236	904,558	168,091	167,640
2001 YTD	128,498	136,228	326,374	22,391	284,758	898,249	164,279	164,693
2001 Total	151,864	163,018	428,603	26,330	347,156	1,116,971	254,982	232,461
2000 Total	147,708	153,905	425,849	26,515	364,785	1,118,762	160,749	239,670

Dec-01	95.5	93.1	100.9	101.0	98.0	97.5

Rail service may be ordered directly from the railroad via Auction for guaranteed service or tariff for nonguaranteed service, or through the secondary market. The Secondary Rail Market information reflects trade values for service that was originally purchased from the railroad carrier as some form of guaranteed freight. The auction and secondary rail values are indicators of rail service quality and demand/supply.

Secondary Rail Car Market Average Premium/Discount to Tariff, \$/Car - Last Week							
	Delivery Period						
	Aug-02	Sep-02	Oct-02	Nov-02			
BNSF-GF	\$(5)	\$0	\$(2)	\$(3)			
UP-Pool	\$(55)	\$(35)	\$(5)	\$(10)			

Railroad Car 'Auction' Results Average Premium/Discount to Tariff, \$/Car - Last Auction							
Delivery for:	Sep-02	Oct-02	Nov-02				
COT/N. Grain	no bid	no bid	no bid				
COT/S. Grain	no bid	no bid	\$0				
GCAS/Region 2	no bid	no bid	no offer				
GCAS/Region 4	no bid	no bid	no offer				
Source: Transportation & Marketing/AMS/USDA.							



## **Tariff Rail Rates for Unit Train Shipments**

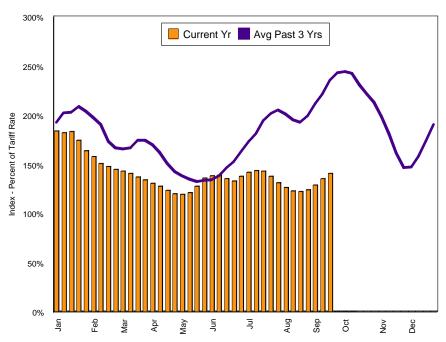
November 20	)02						
Date Effective	Tariff Item	Commodity	Origin	Destination	Rate Per Car	Rate Per MT	Rate/Per Bushel*
11/04/02	45560	Wheat	Minneapolis, MN	Houston, TX	\$2,050	\$22.60	\$0.62
11/04/02	43521	Wheat	Minneapolis, MN	Portland, OR	\$3,877	\$42.74	\$1.16
11/04/02	46540	Wheat	Kansas City, MO	Houston, TX	\$1,650	\$18.19	\$0.50
11/04/02	43586	Wheat	Kansas City, MO	Portland, OR	\$4,347	\$47.92	\$1.30
11/04/02	43581	Wheat	Omaha, NE	Portland, OR	\$4,005	\$44.15	\$1.20
11/04/02	31005	Corn	Minneapolis, MN	Portland, OR	\$3,050	\$33.62	\$0.85
11/04/02	31035	Corn	Kansas City, MO	Portland, OR	\$2,700	\$29.76	\$0.76
11/04/02	31005	Corn	Omaha, NE	Portland, OR	\$2,850	\$31.42	\$0.80
11/04/02	61110	Soybean	Minneapolis, MN	Portland, OR	\$3,030	\$33.40	\$0.91
11/04/02	61110	Soybean	Omaha, NE	Portland, OR	\$2,780	\$30.64	\$0.83

Source: www.bnsf.com

Approximate load per car = 100 tons: Corn 56 lbs/bu, Wheat & Soybeans 60 lbs/bu

#### **BARGE TRANSPORTATION**

## Illinois River Barge Rate Index - Rate Quotes



The Illinois River Barge
Rate Index averaged 183%
of the Benchmark Tariff
Rate between 1999 and
2001, based on weekly
market quotes. The Index,
along with Rate Quotes
and Futures Market bids
are indicators of grain
transport supply and
demand.

Calculating barge rate per ton: Index  $\times$  1976 Tariff Benchmark Rate per Ton

Select applicable index from market quotes included in tables on this page. The 1976 benchmark rates per ton are provided in map below.

BARGE RATE QUOTES: Southbound Barge Freight Index=Percent of Tariff, Based on 1976 Tariff Benchmark Rate									
	11/6/02 10/30/02 Dec '02 Feb '03								
Twin Cities	295	264	nq	nq					
Mid-Mississippi	263	240	nq	nq					
Illinois River	217	209	171	175					
St. Louis	186	218	123	123					
Lower Ohio	177	205	193	127					
Cairo-Memphis	172	204	119	113					
Source: Transportation	& Marketing /AM	IS/USDA; nq=1	Source: Transportation & Marketing /AMS/USDA; ng=no quote						

#### BARGE FUTURES MARKET Southbound Barge Freight Nominal/Cash Basis Values Index=Percent of Tariff, Based on 1976 Tariff Benchmark Rate

Source: St. Louis Merchants Exchange

		Contract	Ra	Rate		
Week ended	River/Region	Period	Futures	Cash		
11/12/02	St. Louis	Sept	n/a	n/a		
		Nov	n/a	180		
		Jan	n/a	125		
		Mar	n/a	125		
		May	n/a	125		
	Illinois River	Sept	n/a	n/a		
		Nov	n/a	215		
		Jan	n/a	193		
		Mar	n/a	160		
		May	n/a	145		

Barge Benchmark Tariff
Rates
Est. 1976 - Tariff No. 7

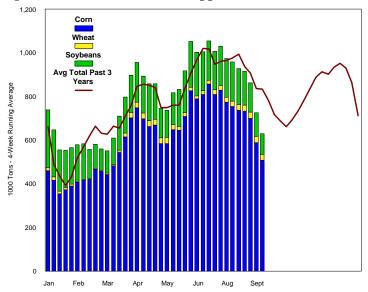
Barge Benchmark Tariff
Rates

St. Louis
3.99

Memphis
4.04
3.14

Greenville
2.29

## Barge Movements on the Mississippi River (Lock 27)

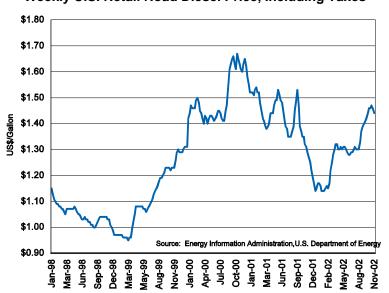


Barge Grain Movements for week ending 11/02/02							
	Corn	Wht	Sybn	Total			
		1,000	Tons				
Mississippi River							
Rock Island, IL (L15)	299	5	208	514			
Winfield, MO (L25)	361	9	326	703			
Alton, IL (L26)	578	9	388	981			
Granite City, IL (L27)	569	9	391	975			
Illinois River (L8)	152	2	47	201			
Ohio River (L52)	13	0	61	114			
Arkansas River (L1)	0	13	22	34			
2002 YTD	28,642	2,253	9,335	41,590			
2001 YTD	26,631	2,338	7,712	38,331			
% of Last Year	108%	96%	121%	109%			
Total 2001	31,878	2,679	10,616	47,091			

YTD and Calendar year total includes Miss/27, Ohio/52 and Ark/1. Source: U.S. Army Corp of Engineers.

## TRUCK TRANSPORTATION

Weekly U.S. Retail Road Diesel Price, Including Taxes



The weekly **Diesel Price** provides a proxy for trends in U.S truck rates. Diesel fuel is a significant expense for truck grain movements, accounting for 37% of the estimated variable cost. **Crude Oil Price** is an indicator in future diesel price trends.

Crude Oil Prices US\$ per Barrel	This Week	Last Week		Average 2001*
Light Sweet Crude (NYMEX)	28.51	28.34		22.06
Brent Crude	26.76	26.26	•	22.96

Source: <a href="www.eia.doe.gov;">www.eia.doe.gov;</a>\*U.S. Refiner Crude Acquisition Cost, Composite Domestic & Import

Note: Light Sweet Crude is exchanged on the New York Mercantile Exchange. North Sea oil has a "benchmark" role in crude oil pricing. Brent crude, a blend of North Sea oils, is traded on the International Petroleum Exchange in London

## **GRAIN EXPORTS**

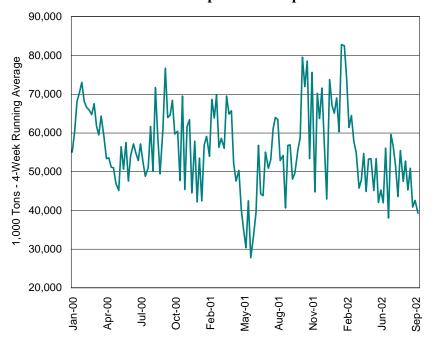
U.S. Export Balances (1,000 Metric Tons)

			V	Vheat			Corn	Soybean	Total
	HRW	SRW	HRS	SWW	DUR	All		•	
Unshipped Export Balances									
10/31/02	1,428	690	1,630	790	177	4,715	7,805	7,920	20,440
This Week Year Ago	1,382	1,018	1,017	573	240	4,229	7,028	8,606	19,863
Cumulative Exports-Crop Year	r								
01/02 YTD	3,625	1,193	2,960	1,542	386	9,705	5,705	4,365	19,775
00/01 YTD	3,460	2,375	2,308	1,371	573	10,087	7,569	17,713	35,369
99/00 Total	9,858	4,710	6,305	5,413	1,232	27,518	37,220	24,516	89,254
98/99 Total	7,387	3,645	7,864	6,105	963	25,965	44,476	24,501	94,942
97/98 Total	9,867	6,792	8,918	6,443	897	32,918	55,769	23,550	112,237

Source: Foreign Agricultural Service YTD-Year-to-Date (www.fas.usda.gov) Crop Year:Wheat=5/31-6/01, Corn & Soybeans=9/01-8/31

Select U.S. Port Regions - Grain Inspections for Export - 1,000 Metric Tons												
	Pac	cific Reg	<u>gion</u>	Mis	ssissippi (	<u>Gulf</u>	<u>T</u>	exas Gu	<u>lf</u>	<u>F</u>	Ort Region Tota	1
	Wheat	Corn	Soybn	Wheat	Corn	Soybn	Wheat	Corn	Soybn	Pacific	Mississippi	Texas
11/07/02	162	137	135	130	389	929	79	0	0	434	1,447	79
2002 YTD	7,617	3,169	2,383	4,778	31,429	14,099	5,134	259	907	13,169	50,306	6,301
2001 YTD	8,363	4,667	2,260	5,441	30,338	12,993	4,944	253	1,382	15,291	48,771	6,579
% of Last Year	77%	53%	139%	71%	89%	79%	74%	55%	90%	75%	84%	75%
2001 Total	10,007	5,877	1,647	6,829	34,991	17,996	6,984	470	1,008	17,530	59,816	8,462
Source: Federal Gra	Source: Federal Grain Inspection Service YTD-Year-to-Date											

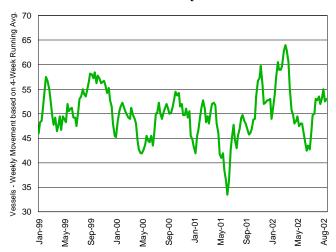
## **U.S. Grain Inspected for Export**



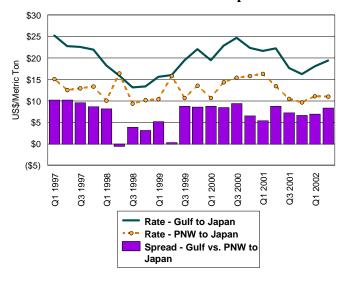
Select Canadian Port Export Inspections 1,000 Metric Tons, Week End Summary								
11/07/02 Vancouver	Wheat 318	<u>Durum</u> 21	Barley 5					
Prince Rupert	577	49						
Prairie Direct	168	139	67					
Thunder Bay	146	119	59					
St. Lawrence	2,488	424	96					
2001/02 YTD	3,697	752	227					
2002/03 YTD	1,676	922	132					
% of Last Year	221%	82%	172%					
Source: Canadian G	rains Commi	ission, Crop Y	ear 8/1- 7/31					

Port Region Ocean Grain Vessels									
		Gulf		Pacific Northwest	Vancouver B.C.				
	<u>In Port</u>	Loaded 7-Days	Due Next 10-Days	In Port	In Port				
10/31/02	43	58	75	12	1				
11/07/02	55	55	82	10	3				
2001									
Range	(1365)	(2864)	(4681)	(118)	(420)				
2001 Avg	36	48	63	9	12				

## Gulf Port Region Grain Vessel Loading Past 7 Days



#### **Grain Vessel Rates to Japan**



	Quarterly Ocean Freight Rates								
Average Rates & Percentage Changes, U.S. Dollars/Metric Ton									
	2002 3 <sup>rd</sup> Qtr	2001 3 <sup>rd</sup> Qtr	% Change	2002 3 <sup>rd</sup> Qtr	2001 3 <sup>rd</sup> Qtr	% Change			
Gulf to				Pacific NW to					
Japan	\$19.54	\$17.69	9%	Japan \$11.57	\$11.46	10%			
Mexico	\$7.14	-	-						
Venezuela	-	\$13.45	-						
N. Europe	-	\$12.06	-	Argentina to					
N. Africa	\$31.64	\$18.21	42%	Med. Sea \$19.93	-	-			
Med. Sea	\$11.92	\$12.05	-1%	N. Europe -	\$16.22	-			
Black Sea	-	-	-	Japan -	\$29.40	-			

Source: Transportation & Marketing/AMS/USDA; (\*) rates shown are for metric ton (2,204.62 lbs.=one metric ton)

Ocean Freight Rates for Select Shipments - week ending 11/09/02									
Export Region	Import Region	Grain	Month	Volume Loaded (Tons)	Freight Rate (\$Ton)				
U.S. Gulf	Peru	Wheat	Nov20/30	25,000	\$73.08 <sup>*</sup>				
U.S. Gulf	Poti, Georgia	Wheat	Spot	30,000	\$23.75				
U.S. Gulf	Japan	Heavy Grain	Nov 05/20	42,000	\$25.50				

Source: Maritime Research Inc.; rates shown are for metric ton (2,204.62 lbs.=one metric ton), F.O.B., except where otherwise indicated; op=option \*The Jones Act requires shipments of food aid from the U.S. to be shipped on U.S. flag vessels. These vessels are of limited availability resulting in higher rates. In addition, destinations receiving food aid generally lack adequate port unloading facilities, requiring the vessel to remain in port for a longer duration than normal. Lastly, the loading and unloading of bagged commodities is generally more labor intensive than bulk shipments, which also contributes to the additional cost.

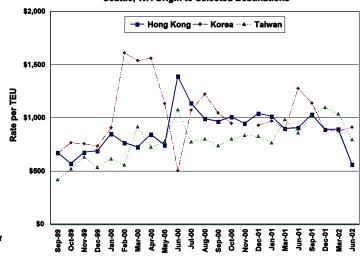
## CONTAINER

## **Container Ocean Freight Rates**

Monthly Weighted Averages Based on Shipping Line Monthly Mkt. Share Source: Transportation & Marketing/AMS/USDA

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#### Container Rates - Feed Grain Seattle, WA Origin to Selected Destinations



Approximately 420,000 MT of grain and oilseed exports were marketed via container in 2001. This volume increased 26% compared to 1997.